

Steganograms

Julien Bismuth

September 19 – October 31, 2015

Steganogram I

This work is titled Steganogram I. It consists of an image that has been encrypted with a text by means of digital steganography. The text that has been encoded is the text that you are now reading. Along with the encrypted image, both a copy of this text and a print of the original unaltered image are also exhibited, so that all elements of the work are on display.

The text is encoded within the data of the image. By altering the data, the encryption also alters the colors of the individual pixels of the image. The program I am using allows me to make the encryption more or less visible, by making the shifts in color more or less obtrusive. This text has been encoded at the highest level of visibility, meaning that the image has been completely altered and abstracted by the encryption. As if you could say something about an image that would dispense with the necessity of actually looking at it.

Patterns of disorder. There is a correlation between the original photographic image and steganographic encryption. The posters are veiled by paint, yet they remain visible (like fossils held captive, like captives). I am neither interested in dissimulation nor containment. Though I like codes and riddles, I have little patience for solving them. I like the idea of coloring an image with language. This text neither explains nor reveals anything about either of the two images that accompany it. It has been written so as to have something with which to alter, color an image.

There is an element of surprise to photography that has all but been lost or jettisoned with the advent of digital media. Remember when you did not know what you were going to get until it was too late? There is a dispossession that we have relinquished in the way we engage with images, a dispossession that is being replaced by other, far more insidious forms of dispossession. Something should be said here about the pace and quantity at which images are now being produced and circulated. Yesterday I was looking at a woman looking at images on her phone in the subway. She had no signal; she was simply weeding through what had been sent to her before she boarded the train. Half of them were images of celebrities, posing in swimwear, the other half were images of her friends, posing alone or with other friends, also in swimwear. She flitted through them rapidly, stopping occasionally to reply with a word or two or three or something else. I could look as much as I wanted to, as overtly as I wanted to, for her attention was completely held by the screen. That's it for now, for this first text, this first image.

Every pixel in a 24-bit digital image consists of three channels or bytes of color (RGB or red, green, and blue), each of them 8 bits in length (a bit is either a 0 or a 1). If I set the visibility level at 1, only one bit in each channel is altered by the encryption. If I set it at 2, then 2 bits in every channel are altered, and so on and so forth. If I set it at 8, then all 8 bits in each channel are altered, turning the image into a field of noise. This is what the encryption looks like when it's set at 8.



Steganogram II

This is another steganogram, which is a neologism I derived from the word 'steganography,' which is the art of hiding a text inside an image. Language is a line, but lines can be looped or twirled or curved or coiled or broken even, broken off and resumed elsewhere. I thought I could write this email as a single unbroken sentence, but I stopped upon hearing the sound of something drying, tumbling and drying beneath my feet.

If I remove its point of reference, see how the most banal observation shifts, alters? The words I use are doubled, doubled up, to reflect the two-faced, two-sided logic of this work, this project as a whole. This work is titled Steganogram II. It consists of an image that has been encrypted with a text by means of digital steganography. The text that has been encoded is the text that you are now reading. Along with the encrypted image, both a copy of this text and a print of the original unaltered image are also exhibited, so that all elements of the work are on display.

Digital steganography works by encoding a text inside the data of an image file. By altering the data, the encryption also alters the colors of the individual pixels of the image. I shot this image on a 35 mm film camera, then scanned the negative to produce a digital file. I have been shooting with film neither out of nostalgia nor attachment to the "look" of a film image, but because of the inherent delays and uncertainties of the medium. I have been writing these texts as if they were emails so as to feel as if I were addressing someone or something. This text does not seek to explain anything. It has been written to evacuate speech. Every interpretation is an occultation. Every statement of intention is a feint or a solicitation. That which shows does not tell, but if you zoom in and out of the encrypted image, you will start to see patterns to its disruption.

Each pixel in a 24-bit digital image consists of three channels or bytes of color (RGB or red, green, and blue), each of them 8 bits in length (a bit is either a 0 or a 1). If I set the visibility level at 1, only one of 8 bits in each byte is altered by the encryption. If I set it at 8, then all 8 bits are altered, turning the image into a field of noise. This is what the encryption looks like when it's set at 7.



Steganogram III

And another. This image is titled Steganogram III because it will be the third in the series of works by that title. This text will be hidden inside an image using digital steganography. I've explained this process to you before. You can also look it up on the web. Basically, the text is encoded inside the data of the image. By altering the data of the image, the encryption alters the colors of the individual pixels of the image. I can make this shift in color more or less visible with the program that I am using, which was designed by my cousin Vincent Bismuth. I could have purchased a commercial steganography program but he offered to write one for me, and I found that more appealing. Each steganogram consists of an encrypted image, shown alongside the encoded text and a print of the original unaltered image.

To color an image with a text. To hide a text in an image. If you were to ask me why I made these works, I would tell you that it is more for the first than for the second reason. In fact, the encryption is made possible by the fact that both the text and the image have been reduced to sequences of the same two numbers: an absence and a presence, a 0 and a 1. Though it may seem trite, there is something to this reduction that stays. The first person, I think, I am not sure, but I think that the first person to have thought of encoding information by means of a binary code was Francis Bacon. Bacon's cipher is an example of steganography with binary encoding. Digital steganography, the kind that I am using here, is basically a variation on Bacon's cipher.

But you can find all of this information elsewhere. And I am only writing this, writing this much, so that I will have something with which to alter the color of the image. And the image is just something in which to hide a text, this text. I only really start to see an image once I forget what it's about. What is the word for how a mountain grows in size? Does it develop? Does it accumulate? The word 'ravel' means to "work in perplexity." Think of the difference between working in and working with. An image is not a surface it's a screen meaning it's neither a mask nor a mirror; it's a face, a frozen face, pressed against a window's glass like a stain. An image is a stain. So much of how we interact with images reduces to a game of recognition, punctuated by instances of more or less recognizable humor. The way we tell jokes is molded by the way we see jokes being told on TV. When she laughs, I am reminded of their favorite sitcom, which is 'Frasier.' What we've learned to recognize are things as unflinchingly perishable as what the name 'Frasier' brings to mind. Even though I have never watched the show, I can recall the faces of its actors, its set, even its demeanor. Sitcoms, like office plants, have their demeanor.

A metaphor is most effective when it lands beside its target. Every pixel in a 24-bit digital image consists of three channels of color (RGB or red, green, and blue), each of them 8 bits in length (a bit is either a 0 or a 1). If I set the visibility level at 1, only one bit in each color channel is altered by the encryption. If I set it at 8, then all 8 bits in each channel are altered, turning the image into a field of noise. This is what the encryption looks like when it's set at 6.



Steganogram IV

1. Steganogram is a neologism derived from the word steganography. Steganography is the process of hiding a text inside an image. Banks, terrorists, and government agencies use steganography to conceal secret messages inside digital image files. The images can then be posted in plain view: on social networks, chat rooms, or, as is often the case, pornography sites.

2. This work is titled Steganogram IV. It consists of an image that had been encrypted with a text by means of digital steganography. The text that has been encoded is the text that you are now reading. By altering the data of the image, the encryption also alters the colors of the individual pixels of the image. The program I am using allows me to make the encryption more or less visible, by making the shifts in color more or less conspicuous. This text is to be shown within proximity of the encoded image, alongside a print of the original unaltered photograph, so that all elements of the work are on display.

3. I cut and pasted this last passage from an earlier draft. There is a continuity to these works, just as there is a continuity to all of the disparate manifestations of my activity, that has to be constantly broken in order to be revived. Continuity is a stitch. The discontinuous repetition of the word 'continuity' in this paragraph is an illustration of precisely this analogy.

4. Framing: is something that I've always tried to avoid. See how the colon hangs in that last sentence like a glitch that does not break but rather highlights the integrity of the statement? Its name calls something to mind that makes me want to laugh. This is how I would like my frames to be:

5. Like a crease, like a crease in a landscape, like a crease in an image of a landscape.

6. Or like a brawl. A few days ago, I was riding a bus. The man sitting in front of me was watching a video titled 'Bad Softball Dads.' The two protagonists were wearing similar outfits (t-shirts, cargo shorts, white sneakers). They were having an altercation. Within seconds, the fitter and leaner of the two had flipped and pinned his opponent to the ground and was pummeling him in the face repeatedly. The video ended with their mug shots. One was badly injured, the other looked somewhat uneasy or bashful. My neighbor watched the video in silence just as I now found and watched it again in silence. I thought of nothing while watching this video but it stayed with me nonetheless. I thought of nothing other than the similarity of their outfits.

7. Encryption as pollution. The image is polluted by the encryption of the text. This is a metaphor that my father used when I showed him these works, he compared them to the way smog alters and intensifies the colors of a sunset. He also compared them to blotters, which made me think of wax tablets and mystic writing pads, memories as colored filters, language as gridded sight, stakes, claims.

8. Every pixel in a 24-bit digital image consists of three channels of color (RGB or red, green, and blue), each of them 8 bits in length (a bit is either a 0 or a 1). If I set the visibility level at 1, only one of the 8 bits in each channel is altered by the encryption. If I set it at 2, then 2 bits are altered. This is what the encryption looks like when it's set at 5.



Steganogram V

The text you are reading has been encrypted into the image that accompanies it. The text is encrypted into the data of the image by means of digital steganography, from the Greek words 'steganos' (hidden, concealed) and 'graphein' (writing). By altering the data of the image, the encryption also alters the colors of the individual pixels of the image.

The work consists of a framed print of the encrypted image (to be hung on a vertical surface), and prints of this text and the original unaltered image (to be shown side by side on a horizontal surface).

And this is from an article I found on steganography, written by Professor Alan Woodward of the University of Surrey:

"Is there a hidden threat right under our noses? Each day billions of messages are sent over the Internet. Not surprisingly, some contain very sensitive information and much effort goes into making sure these messages are unreadable by anyone other than the intended recipients. This is the essence of cryptography. But, there is another option: hiding messages in plain sight, the electronic equivalent of invisible ink. We can think of all messages as falling into one of three categories:

Sense - where the message is sent 'in the clear' and anyone intercepting the data can read it as easily as a valid recipient.

Nonsense - where the intercepted data is turned into nonsense so that only someone with the right key can convert the message back from nonsense to sense. This is cryptography.

Missense - where the message is embedded in some innocuous looking data so that no one would suspect there was a hidden message. This is known as steganography."

The article was illustrated with an image of James Bond. This was the caption for the image:

"It may not look like it but this promotional image of James Bond has been treated to contain a message hidden within it... Digital images in many formats can have the data that describes each element of the picture altered very slightly without perceptible changes to the image. Suppose you changed on only one 'bit' in each element in order to hide data: without the original for comparison no-one would notice anything unusual. When you know which elements to look at and which bits were changed you can extract the hidden data and hence your secret message. In case you are wondering, the text hidden inside the image reads: This is a secret message that I want no-one to read."

Every pixel in a 24-bit digital image consists of three channels of color (RGB or red, green, and blue), each of them one byte or 8 bits in length (a bit is either a 0 or a 1). The program that I use allows me to set the visibility level of the encryption on a scale of 1 to 8, 1 being the least visible. If I set the visibility level at 1, only one bit in each channel is altered by the encryption. If I set it at 2, then 2 bits are altered in each byte, etc. This is what the encryption looks like when it's set at 4.



Steganogram VI

The image you see on the wall contains this text. The text has been encrypted into the data of the image by means of digital steganography, from the Greek words 'steganos' (hidden, concealed) and 'graphein' (writing). By altering the data of the image, the encryption also alters the colors of the individual pixels of the image. The distortion of the colors in this image is all but imperceptible. You can see it if you look closely at the grain of the image. You'll see that individual pixels are visibly off. Off as opposed to on, like on call or right on target. I have placed a smaller print of the original unaltered image beside this text, so that you can compare it to the encrypted version.

Each work in this series consists of three elements: an inkjet print of the encrypted image, a c-print of the original unaltered photograph, and the text. I would like the encrypted image to be framed and hung on a vertical surface. I would like the text and the original photograph to be shown side by side on a horizontal surface. The program I am using has two functions. The first starts with the command 'stegano_hide.' This is where I encode the text into the image. The second starts with the command 'stegano_reveal.' This is where I ask the computer to decrypt the encoded image and reveal the hidden text. The framed work on the wall corresponds to the first function. The text and original image correspond to the second function, they constitute the 'reveal.'

Why is the work shown in this way? Because someone once said that the realm of the pictorial is vertical, and that of the graphic is horizontal. The graphic has something to do with lines but also with writing. The connection fades here because it is hot, and I am feeling too lazy to pursue or develop it, or perhaps this laziness is a cover for my inclination to leave certain things unstated. If nothing else, I would like to think that I could encourage you to follow these threads on your own.

A funny thing happened to me the other day on my way home. I was about to step into a subway station when I heard someone call my name. I turned around to meet the caller's gaze but he or she looked right through me. Their sex, like their physiognomy, is something that I've either forgotten or that I could not detect. No one else answered and yet they kept calling my name. The plural form is the closest thing I could find to a neutral gender. On another occasion, I dreamt that I was visiting a friend's studio. Its different work islands were connected by thin porcelain walkways the width of one's foot. He was working on hundreds of paintings at the same time. I cannot remember what the paintings looked like, perhaps they were undefined, things are sometimes left unproblematically undefined in dreams. We spoke about ecstatic constraint. He thought "writing a book was a metaphor for all the things we think we'd rather be doing." I walked alone through his backyard, which had several animal pens and garden sheds, separated by piles of sand and gravel and patches of overgrown vegetation. Everything looked like it had been abandoned before being suddenly brought back to use or life or circulation.

Every pixel in a 24-bit digital image consists of three channels of color (RGB or red, green, and blue), each of them 8 bits in length (a bit is either a 0 or a 1). If I set the visibility level at 1, only one bit in each channel is altered by the encryption. If I set it at 2, then 2 bits are altered in each channel, etc. This is what the encryption looks like when it's set at 3.



Steganogram VII

In an earlier draft of this text, I spoke about how everything in this picture seemed like it was about to fall, but the analogy or description seemed to miss its target. I am writing this in a stifled space, writing so as not to look at the disorder that surrounds me. Everything around me, like everything in the picture, looks like it has lost and somehow regained its precarious posture. As if everything had fallen, but caught itself before hitting the ground. As if everything were off-balance but tensed, tensing to stay this side of vertical.

This work is titled Steganogram VII. It consists of an image that has been encrypted with a text by means of digital steganography. The text that has been encoded is an earlier draft of the one you are reading. Perhaps this earlier version was better. I wouldn't know because I no longer have it in front of me. I would like to think that I no longer have it all, that it only survives inside the image. The encryption of the text into the image is done by digital steganography, which I've explained to you before and which I'll try to explain again at the end, the tail end, of this text. The encryption is made possible by the fact that digital image and text files consist of sequences of the same binary code. Francis Bacon is credited with having invented binary codes. Bacon's cipher is an example of steganography that uses binary encryption. And this is from a passage in Bacon's writings on binary codes:

"For by this Art a way is opened whereby a man may expresse and signifie the intentions of his minde, at any distance of place, by objects which may be presented to the eye, and accommodated to the eare: provided those objects be capable of a two-fold difference onely: as by Bells, by Trumpets, by Lights and Torches, by the report of Muskets, and any instrument of like nature. But to pursue our enterprise, when you addresse your selfe to write, resolve your inward-infolded Letter into this Bi-literarie Alphabet."

This is an image of an aftermath or this is an image I took while on holiday with my wife, in Mexico of all places. The program I am using to encrypt the text into the image allows me to make the encryption more or less visible. Every pixel in a 24-bit digital image consists of three channels of color (RGB or red, green, and blue), each of them 8 bits in length. If I set the visibility level at 1, only one bit in each channel is altered by the encryption. If I set it at 8, then all 8 bits in each channel are altered, turning the image into a field of noise. This is what the encryption looks like when it's set at 2. The alteration of color is all but imperceptible, even if you compare it to the original image, which is also on display.



Steganogram VIII

The image is static but the text retains a certain movement and plasticity. The images are set, but the texts retain a potential for change and emendation. This work consists of an image and a text. These works consists of a series of texts in images. The texts have been encrypted into the images that they are paired with. The encryption was done by means of digital steganography, which is a process that I will continue to explain in each text, but whose definition can be found elsewhere, just as anything can immediately be found elsewhere nowadays, not just anywhere but more or less everywhere.

The software program that I used was designed by my cousin, Vincent Bismuth. I am not sure that I can explain what he does, but he's an engineer. He is working on machines that see, or rather, machines that help people see. Can a machine be made to see and if so, what kind of sight would or could it be? We perceive the world through curtains of words that we cannot part or part with. And when I call something by name, its form slips away like a knot. My cousin tells me that he worked on medical imagery for ten years and that he is now working for a company that is developing a bionic eye for the blind. All of these works form a series that I hope to extend and blend with other series of other texts hidden in other images. I think of every piece that I make as a page in a book whose dimensions I want to leave undefined, like a dream, or like certain things in dreams.

This work is titled Steganogram XIII, from the word steganography or 'hidden writing.' These first eight steganograms form a series within a series, because they show all eight degrees of visibility of the encryption process. I encoded this image with this text, but also with the texts of the seven other steganograms that preceded it. The other day, when I went to the post office, I saw a man clothed in layers of rags and cardboard like onion skins. He was sitting on the curb, carefully applying white glue to the outside of a padded envelope whose postage had already been paid, but which had not yet been mailed. I only glanced at him briefly, but I can still remember the image in all of its detail. Gazes are at their most impressionable when they're thrown.

Every pixel in a 24-bit digital image consists of three bytes, each corresponding to a color (RGB or red, green, and blue), each of them 8 bits in length. The program that I use allows me to set the visibility level of the encryption on a scale of 1 to 8, 1 being the least visible. If I set the visibility level at 1, only one bit in each byte is altered by the encryption. If I set it at 2, then 2 bits are altered in each byte, etc. This is what the encryption looks like when it's set at 1. It is all but invisible to the naked eye.



Steganogram IX

1. I'll start things off with an image. Something I saw and wrote down in the notebook that I always carry around with me:
2. I was crossing a street, and I saw smoke. The municipal trashcan on the street corner ahead of me was filled with paper. In the gutter beside it lay a single burning sheet of newspaper, tabloid format. Further down that same block, a man flicked a cigarette onto the sidewalk. It landed then rolled back towards the street before coming to rest in the epoxy-filled crack between the sidewalk and its edge or frame. A sidewalk's frame. All the things we cannot see, we see in images. The man was standing in the street rather than on the sidewalk, and when he flicked his cigarette onto the curb, it rolled back towards him before coming to a stop in that epoxy-filled crack.
3. "Objects which in themselves we view with pain, we delight to contemplate when reproduced with minute fidelity." From the 1895 translation of Aristotle's 'Poetics' by S.H. Butcher.
4. "Bulldoze comes from the earlier noun bulldose meaning 'a severe beating or lashing' (1876), literally 'a dose fit for a bull,' a slang word referring to the intimidation beating of black voters (by either blacks or whites) in the chaotic 1876 U.S. presidential election." I got that from an online etymological dictionary called The Online Etymological Dictionary.
5. The loudness of the engine dissimulates the looseness of its moving parts. He only wanted to get on with the sentence. If you constantly post something, you'll forget that it's actually there, you'll only remember that you've seen it everywhere.
6. I shot this in a market. Think of the different meanings of the words 'shot' and 'market.' Think of what it means to 'take' an image. Think of a take. Or don't think, take.
7. All you see is noise. The text you are reading has been hidden inside the image that it accompanies. It has been encrypted inside the data of the image file by a process called digital steganography. By altering the image's data, the steganographic software alters the colors of its individual pixels. The program that I am using was designed by my cousin Vincent. It allows me to make the encryption more or less conspicuous by determining how many bits in every byte are altered by the encryption. The visibility level of the encryption that I used for this work is 8, meaning 8 out of 8 bits in each byte were encoded. As a result, the image is completely abstracted of its form and content, from the verb 'abstract' meaning "to draw away the attention of."
8. This work is titled Steganogram IX. Along with the encrypted image, both a copy of this text and a print of the original unaltered photograph are also exhibited, so that all elements of the work are on display.
9. I took this photograph on a 35 mm point and shoot camera. We say that we take or shoot pictures, but neither verb seems adequate to the incongruity of what it seeks to designate. I can only point to the things that I cannot name, or I can only see them meaning only I can see them. Eye or I, the homophony is obvious, but it was not evident to me until I pointed it out to you.



Steganogram X

Only one of them is made out of bronze or gunmetal. There is a discrepancy between the subjects of the image, just as there are discrepancies between all the elements of this work. It's hard to see the rest of the blade when you're its sharpest edge. None of these discrepancies are underlined, none of them clash, in fact they recede to all but the most insistent of gazes.

This work is titled Steganogram X. It's a diptych and it consists of two images that have been encrypted with the same text by means of digital steganography. The text that has been encoded into the images is the text that you are now reading. Along with the encrypted images, both a copy of this text and print of the original unaltered photographs are also exhibited, so that all elements of the work are on display.

The difference between the two sets of images is hard to see, hard to distinguish from the digital noise brought about the scanning of the negative, the enlargement of the scan, and the printing. It can only be revealed by the same software program that I used to encode the images. Computers do not see, they process, and the blindness of a processor is the purest as in most unsuspecting form of blindness.

Purity, like perfection, is a distinction that only death offers or that only offers death. That's not wordplay - it's language doing it better than I ever could have on my own. So much of what I do is trim. This is taken from something you read to me earlier. Perhaps you'll remember that we both laughed at the same passages:

"It was no bigger than his thumb, but he loved it immediately. He liked it, tapping the white heart beneath the picture so that it turned red. He pressed the name written in blue under the heart. More pictures appeared, this time the size of his thumbnail. He tapped on one to enlarge it. Someone had written a comment underneath. Pressing this led to a personal profile: more pictures, a website address, a small round portrait and the name of a young Danish man."

Digital steganography encodes a text as alterations in the data of an image. By altering the data, the encryption also alters the colors of the individual pixels of the image. Every pixel in a 24-bit digital image consists of three channels of color (RGB or red, green, and blue), each of them one byte or 8 bits in length. If I set the visibility level at 1, only one bit in each byte is altered by the encryption. If I set it at 8, then all 8 bits of each byte are altered, turning the image into a field of noise. This is what the encryption looks like when it's set at 1. The change in color is imperceptible to the human eye.

"He confesses that when he unpacked it, it was a little different from what he had expected." Everything had been brought down to size except the actual thing, which had kept its girth. I'll go ahead and encode this draft, knowing full well that I'll revise and revisit it later, but I think that's fine. What's a difference when it's a difference that no one else can see? If you look at both images, you'll see that the grass is greener and the dogs are sharper in what I like to call the second of the two photographs because it's the one that I shot last.



Steganogram XI

Hi everyone,

So here's the press release. An earlier draft of this text is encoded into the image we used for the poster and the email. Christine just told me yesterday that the printers thought that there was something with their machine when they printed it because of the distortion brought about by the encryption.

The title of the show is Steganograms. It's a nice segueway from the title of my last show at Emanuel Layr's, which was Stenograms. Steganography is the art of encrypting a text into an image. Stenography is another name for shorthand. I encountered the word steganography while researching stenography on the web, and I coined the word steganogram from it. Even search engines can lead you down garden paths.

And these are the works for the show:

1. The Steganograms:

Each work consists of an image that has been encrypted with a text by means of digital steganography. The texts are encrypted into the images using software designed by my cousin Vincent Bismuth. His program allows me to make the encryption more or less visible, by altering more or less of the data of the image. The image for the press release has been encoded with this text at a visibility of 7 on a scale of 1 to 8, 8 being the most visible. Altering the data alters the colors of the pixels of the image. And that's really what I like most about the whole thing. Coloring an image with a text, transcoding a text as shifts in color of the mosaic pieces of an image.

Along with the encrypted image, both a copy of the text and a print of the original unaltered photograph will also be exhibited, so that all elements of the work are on display. The encrypted image will be shown on a vertical surface, like a wall, and the text and original photograph will be shown on a horizontal surface, in this case a vitrine. We're making framed prints of all the encrypted images, but I'm also open to printing them in other sizes and on other surfaces.

2. Untitled (Fill):

That was described in an earlier email. Basically, I'll write a text live, filming and projecting an image of the tabletop and paper on which I'm writing as I write. The work aims to produce an image of writing. It shows a text building up to its conclusion, which comes about when I reach the end of the page.

3. Titular works:

These pieces consist of a title. The title sometimes dictates or describes something outside of itself. So, for example, one of them is just the verb 'replace,' and the way you install is by replacing something in the gallery (an orchid for instance) with something else (another orchid). Another consists of two words separated by a comma: 'place, displace.' That's a descriptive rather than a prescriptive work. It describes



the movement of things being placed and displaced in the gallery. Yet another is just a punctuation mark, a colon, that gets replicated somewhere else in the gallery as a set of two contiguous holes. One of the titles is just a phrase I overheard on the street in New York. And there will also be a series of dimensions that will be installed in the space as gaps or vacancies on its walls. I keep wanting to fill these vacancies with something else: a title, a reference, an allusion. But I think I'll try and leave them vacant for as long as I can.

4. Gödel:

What else? There's a video I want to include of Cheryl and John Dawson, who compiled and edited the complete works of Kurt Gödel. They're shown translating a section from one of Gödel's philosophical notebooks, which he wrote in shorthand. It's a passage about time, and the process of translating it takes a little over 13 minutes. They lose track of the text as they're deciphering it, and so they have to work back to the beginning, start again... time is thus both the topic and the protagonist of the video. I'll include excerpts from my correspondence with the Dawsons that provide a nice introduction to the passage in question, and to Gödel's notebooks as a whole. I became interested in Gödel after reading about the philosophical fragments contained in his private notebooks. Gödel was obsessed with trying to determine the aspects of human thought that could not be replicated by an algorithm, in other words with formulating a reply or response to Turing's machine, without which I could not have made any of the works in the exhibition, at least not in the same way.

5. Helena Valero:

And maybe some collages as well. And also a sound piece, a recording of a woman singing. I titled the work after her. If you look her up, and read the book that tells her life story, you will understand the significance of her voice, her singing voice.

So that's about it.

The show circles around images, words, and numbers. How we communicate differently in all three mediums, especially now that almost everything can be reduced to a line of numerical code. There's a lot more to be said about all of this, but I don't want this text to be too long, so I'll end it here.

Julien Bismuth

